REMARKS

Claims 1-20 are pending in this application.

Applicant appreciates the courtesies shown to Applicant's representative by Examiner Kau in the October 27, 2008 personal interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

I.   Claim 20 is Not Duplicative

The Office Action objects to claim 20 for the first time under 37 CFR §1.75 as allegedly being a substantial duplicate of claim 10. This objection is respectfully traversed.

It is alleged that claims 20 and 10 are duplicates or else are so close that they both cover the same thing despite a slight difference in wording, relying on 37 CFR §1.75 and MPEP §706.03(k). As discussed during the personal interview, Applicant respectfully disagrees.

Claims 20 and 10 do not cover the same subject matter as alleged. Claim 10 is directed to a color processing apparatus comprising: (1) a color adjustment distance calculation section; and (2) a reproduction color decision section. However, claim 20 is directed to a printer comprising a color processing device that includes: (1) a color adjustment distance calculation section; and (2) a reproduction color decision section. Thus, claim 20 recites an additional element (e.g., a printer) not recited in claim 10.

Examiner Kau asserted during the interview that the color processing apparatus could function as a printer. However, as discussed, claim 10 is directed to structure that processes color. There is no structure that explicitly describes or claims printing of the processed color. Although there is a reproduction color decision section, this section decides a reproduction color to use, but does not otherwise "print" the decided color. By contrast, claim 20 is directed to a printer which, in addition to including a color processing device that has a color

adjustment distance calculating section and a reproduction color decision section, also further limits the claim by reciting "printer" which must include by the known meaning of the word some structure in addition to processing capability that achieves this functionality of the ability to print. Thus, as discussed, although claim 10 may be a genus claim that broadly encompasses claim 20 because of the open-ended language, claim 20 further limits the subject matter of claim 10 by additionally reciting a "printer." Therefore, although similar, there is a difference in claim scope.

As acknowledged in MPEP §706.03(k), "court decisions have confirmed applicant's right to restate (i.e., by plural claiming) the invention in a reasonable number of ways. Indeed a mere difference in scope between claims has been held to be enough." In this case, claim 20 has a differing scope than claim 10 because it recites and thus requires the additional structure of a "printer."

Accordingly, claim 20 is not a duplicate of claim 10. Withdrawal of the objection is respectfully requested.

II.   Finality is Premature

Because the above objection of claim 20 was not previously of record and because Applicant did not amend claim 20 in the last response, this new grounds of objection was not necessitated by Applicant's amendment. Therefore, the finality of this Office Action is premature.

Applicant thus respectfully requests withdrawal of the finality of the Office Action.

III.   Pending Claims 1-20 Define Patentable Subject Matter

Claims 1, 8-10 and 17-20 are rejected under 35 U.S.C. §102(a) over U.S. Patent No. 6,917,704 (Kojima); claims 7 and 16 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kojima in view of U.S. Patent No. 6,575,096 (Caruthers); claims 2, 3, 6, 11, 12 and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kojima in

view of U.S. Patent No. 6,108,441 (Hiratsuka); claims 13 and 4 are rejected under 35 U.S.C. §103(a) over Kojima in view of Hiratsuka, and further in view of U.S. Patent Application Publication No. 2002/0090133 (Kim); and claims 5 and 14 are rejected under 35 U.S.C. §103(a) over Kojima in view of Hiratsuka and further in view of U.S. Patent Application Publication No. 2002/0044691 (Matsugu). These rejections are respectfully traversed.

A.   Rejections of Independent Claims 1, 10, 19 and 20

As discussed during the interview, Kojima fails to disclose or suggest "calculating a color adjustment distance, which is a distance on the color space between a representative color representing the specific region in the color image and a target color, which is target of the adjustment, on the basis of the representative color and the target color," and "deciding a reproduction color expressing the representative color of the specific region after the adjustment on the basis of the color adjustment distance."

During the interview, Kojima was discussed. The Office Action relying on col. 4, line 46 to col. 5, line 5 and col. 11, lines 33-40 alleges that Kojima teaches how to select a target color by calculating a variance. Furthermore, Kojima teaches calculation of an average of color data of target color for dividing a region into two sections. Applicant respectfully disagrees that this corresponds to the recited claim language of claims 1, 10, 19 and 20.

In the subject matter of the rejected independent claims, a color adjustment distance is calculated that is a "distance on a color space between a representative color representing the specific region in the color image and a target color, which is target of the adjustment, on the basis of the representative color and the target color." Moreover, a reproduction color located between the representative color and the target color is decided that expresses "the representative color of the specific region after the adjustment on the basis of the color adjustment distance."

The recited target color may be, for example, a given color, a color selected from a plurality of colors, or a color having a predetermined color component ratio (Applicant's specification on pg. 6, lines 7-13). For example, a target color to be adjusted may be sky or flesh tone. As set forth in Applicant's page 3, there is a problem when color is adjusted that is widely different from the target color. For example, the color of sky near a cloudy sky should not be adjusted to that of a target sky color. However, by the recited method and apparatus, unnaturalness due to adjustment to a target color can be prevented because a reproduction color is determined that is between a representative color and the target color <u>on the basis of the color adjustment distance</u>. As discussed, this feature is shown, for example, in Applicant's Fig. 6 where depending on the distance, the reproduction color changes).

In Kojima, as described in Fig. 3 and on col. 5, line 26 to col. 6, line 39, target color selection is described. However, the target color is selected by identifying a primary color of greatest variance using equation 2 from col. 5. All that is achieved with this target color is dividing of a small region into two picture elements -- those above the average for that primary color and those below the average. This division of the small region is continued until a desired number of colors is produced (col. 3, lines 27-37).

Accordingly, the alleged "variance" in Kojima does not equate to the recited calculating of a color adjustment distance. Examiner Kau referred Applicant's representative to Kojima's Fig. 6 and step S203 where a Euclidian distance is computed. While this computes a distance, it is for an entirely different purpose of achieving a compression of data (see Kojima Abstract). Therefore, it is not used or contemplated for the specific usage recited in Applicant's claims which is directed to color adjustment, such as a change in luminosity, chroma, hue, etc. That is, Kojima fails to decide a reproduction color expressing the representative color of the specific region after <u>adjustment on the basis of the color</u>

adjustment distance or that the reproduction color is between the representative color and the target color as claimed.

Instead, in Kojima, as shown in Fig. 3, the average of each color R, G and B in a 4 x 4 small region is calculated (using equation 1) and the variance of the small region is also calculated (using equation 2). G is chosen because its variance is maximum compared to R and B. The region is then divided into two regions 502 and 503 depending on whether G pixel value is greater than the average G value in the region. The representative color of the small region is expressed by representative colors of two sections 502 and 503 designated by C1 and C0. C1 and C0 are averages of regional RGB values in the divided sections 502 and 503 within the small region of 4 x 4 pixels.

Therefore, as discussed during the interview, Kojima's representative colors are chosen based on whether above or below the average color and variance of the color in the small region (for purposes of data compression). If above the average, they are changed regardless of their distance.

Thus, Kojima fails to teach or provide reasons for calculating a color adjustment distance between a representative color and a target color, or deciding a reproduction color expressing the representative color of the specific region after the adjustment on the basis of the color adjustment distance, as recited in independent claim 1 and similarly recited in claims 10,19 and 20. That is, the color adjustment does not differ based on the distance (such as shown in Applicant's Fig. 6), but instead on the average of the pixels in each divided region. Thus, the reproduction color is not adjusted toward a target color, such as sky, so as to be between the representative color and the target color as claimed.

Accordingly, the independent claims 1, 10, 19 and 20 and claims dependent therefrom distinguish over Kojima. The various secondary references fail to overcome the deficiencies of Kojima.

B.   <u>Rejection of Independent Claim 11</u>

Kojima and Hiratsuka, alone or in combination, fail to disclose or suggest "calculating a reproduction distance coefficient, which is used to calculate a reproduction color expressing the representative color of the specific region after color adjustment, on the basis of the color adjustment distance," as recited in independent claim 11.

The Office Action again concedes that Kojima fails to teach this feature. The Office Action alleges that Hiratsuka teaches a reproduction distance <u>coefficient</u> calculation unit (Figs. 1 and 2) for calculating a reproduction distance <u>coefficient</u> (luminosity, chroma and hue parameters), which is used to calculate a reproduction color expressing the representative color of the specific region of the color <u>adjustment</u> (col. 11, lines 11-22; col. 13, lines 10-30), and reproduction color calculation unit for calculating the reproduction color on the basis of the reproduction distance coefficient (col. 11, lines 11-22; col. 13, lines 10-30).

However, the color distance calculation equations in col. 11, lines 11-22, and col. 13, lines 10-30 are to calculate a Euclidean distance between the interpolated color and the designated color on the color space to obtain the interpolated color (Abstract). Hiratsuka uses these distances to interpolate the color adjustment in a five-dimensional table and to calculate accurate level of a reference point (lattice point) (col. 10, line 64 to col. 11, line 3). Therefore, the distance calculated by these equations is not used to obtain a reproduction distance coefficient (such as luminosity, chroma or hue), as recited in claim 11.

The Office Action on page 5 alleges that interpolation is a process of calculating a reproduction distance coefficient with a mathematical approach and corresponds to the recited "calculating a reproduction distance coefficient." Applicant disagrees.

Hiratsuka fails to appreciate the problems solved by the claims. Moreover, Hiratsuka is not combinable with Kojima. Kojima relies on a color with the <u>maximum</u> variance (col. 5, lines 64-67) as the target color. The interpolation of Hiratsuka would have

no purpose in Kojima or would alter the fundamental operation of Kojima. If a proposed modification would render the art being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733, F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Accordingly, independent claim 11 and claims dependent therefrom distinguish over Kojima alone or in view of Hiratsuka. The various secondary references fail to overcome these deficiencies.
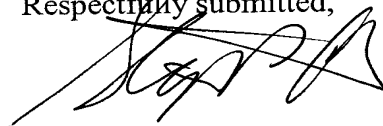
Accordingly, for at least the above reasons, independent claims 1, 10, 11, 19 and 20 are patentable over the applied references. Claims 2-9 and 12-18 depend from one of claims 1, 10, 11, 19 and 20, and therefore are also patentable over the applied references for at least the same reason as in these claims, as well as for the additional features they recite. For the foregoing reasons, withdrawal of the rejections is respectfully requested.

IV.   Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-20 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

Stephen P. Catlin
Registration No. 36,101

JAO:SPC/add

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OLIFF & BERRIDGE, PLC
P.O. Box 320850
Alexandria, Virginia 22320-4850
Telephone: (703) 836-6400

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